TIGERZ Update February 27, 2008

Following is a very brief summary as I know it of the planning effort for the TIGERZ campaign.

The TIGERZ website is http://tigerz.gsfc.nasa.gov. Please send any contributions to Dave Giles that might include:
-- Collaborators (India and outside India); also descriptions of any acronyms

-- Contacts

-- Detailed India maps (other than Google Earth)

-- Relevant India travel information (those who have been there may provide this useful information)

-- White paper information such as planned side activities. For example, an activity may be aerosol characterization using sun photometers and lidar during the morning and afternoon MODIS/MISR overpasses in certain regions:

1. Urban/Rural Kanpur

2. Foothills of Himalayas

-- Measurement protocol for Cimel and other instruments

-- Measurement schedule

-- Information on aircraft and aircraft instruments.

We have an evolving white paper attached and on the website. Please send your modifications to Tom Eck.

We are currently planning to ship approximately 10 to 12 cimels to Kanpur by April 1 to have them ready for deployment on April 15. This includes contributions from PHOTONS (Philippe Goloub) and AEROCAN (Norm O'Neill and Ihab Abboud). Additionally Jeff Reid is planning to contribute a Drum sampler and Leosphere Inc (Laurent Savage). will add their 355 nm ground based lidar to the measurement suite at Kanpur.

Dr. S.N. Tripathi at IIT Kanpur is coordinating the aircraft campaign along with Dr. S.K. Satheesh and Dr. K. Krishnamoorthy and is the TIGERZ POC in Kanpur. Dr. Tarun Gupta at IIT Kanpur assists him.

At Kanpur a faculty house has been reserved for visiting TIGERZ participants that will include food and local transportation.

Joel Schafer has produced a strawman-staffing schedule for TIGERZ participants, which is also on the web. Please update your plans with him or myself.

The intensive measurement period for TIGERZ will be May and June but some along track ground-based measurement sites will remain through the monsoon that we hope will include cloud optical depth measurements, data for cloud droplet size distributions (Alexander Marshak). We expect also that a few instruments will remain as permanent sites and be the basis for subsequent year participation.

An intercomparison campaign between the Marine Aerosol Network (MAN), AERONET and the Multi-Wavelength Radiometer Network (MWR) will be conducted in Trivandrum in March coordinated by Dr. K. Krishnamoorthy and Sasha Smirnov. This we expect will result in an established AERONET site for the duration of the campaign at Visakhapatnam on the southern end of the Calipso track.

Teams (probably of two people) will be responsible for operating ground stations during overpass times and auxiliary measurement campaigns. Dr. Tripathi and Dr. Verma (IIT Kharagpur) will organize student teams. NASA teams will operate out of Dehra Dun and Nainital (MODIS workshop, Rich, Lorraine and Rob) in May and AERONET and student teams will be based in Kanpur (Holben, Eck, Schafer, Giles, Sorokine, Newcomb, Tran, Smirnov, Sinyuk).

A surface reflectance characterization is planned by Arnon Karnieli. All details TBD.

Campaign support: Pete Colarco will be able to provide forecasts from the online GEOS-5 aerosol runs and and Ralph Kahn will contribute MISR maps of AOD and aerosol air mass type providing regional context to the sub-orbital measurements, for a range of aerosol measurement and modeling applications. I expect the AERONET synergy tool will be valuable for bringing a variety of data sets to the ground-based and airborne planning activities.

No TRMM rain gauge participation will be made in 2008. Lunar photometery and shadowband observations are also probably a miss for the pilot phase.

Please note the contact information, transportation info and visa requirements on the webpage.

Thanks everyone!

Brent Holben